

REMARKS

The Examiner objected to the amendment filed March 8, 2004 under 35 U.S.C. § 132 because it introduces new matter into the disclosure. Applicants have canceled paragraph [1084.3] as required by the Examiner. Claims 1-17 are pending. Claims 1-17 stand rejected.

Claim Rejections under 35 U.S.C. § 102

Claims 1, 2, 4, 6, 7, 9, 11, 12, and 16 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,510,515 to Raith (hereinafter “Raith”).

To anticipate a claim, the prior art reference must teach every element of the claim. “A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants respectfully submit that claims 1, 2, 4, 6, 7, 9, 11, 12, and 16 are not anticipated by Raith for the reason and explanations provided below.

Applicants respectfully submit that Raith does not disclose the limitation “transmitting broadcast overhead information corresponding to a broadcast session on an overhead transmission channel from a first device, wherein the broadcast overhead information includes a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service” as found in amended claim 1.

Raith discloses techniques and systems for controlling access to information broadcast over point-to-multipoint resources in radio communication systems. (Abstract). Raith uses broadcast short-message-service (SMS) capability to send short information such as security or stock quotes. (Col. 3, lines 15-17). The broadcast control channel reserved for SMS messages is further subdivided into subchannels. (Col. 3, lines 18-21). This logical channel is divided into at least three logical subchannels which support the broadcast information service: a Security Name Channel, a Start Value Channel, and a Delta channel. (Col. 5, lines 8-10). A status variable may be maintained in the remote device which informs the remote device whether the user is authorized to access a particular service. (Col. 3, lines 27-30). The status variable may be enabled or disabled remotely. (Col. 7, lines 25-26). The status variable only retains enabled state with

respect to a particular service until it receives a disable message or until the date/time of its last received enable signal plus a specified value exceed the current date/time. (Col. 8, lines 44-46). The information broadcast by a service provided may be encrypted and is sent as part of the broadcast channel. (Col. 9, lines 45-46, 53-54). Raith does not disclose “a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”. Furthermore, the broadcasting of Raith is confined to using the SMS service to transmit brief stock quotes or “headlines” to users. In addition, Applicants are unable to find any disclosure or suggestion by Raith in which a protocol stack is used, wherein options are contained within the protocol stack, and where information to setup and synchronize the broadcast service is sent as broadcast overhead information on an overhead channel. Therefore, Applicants submit that Raith does not anticipate Applicants’ invention.

Additionally, the Examiner cites U.S. Patent 5,768,276 to Diachina et al. (hereinafter “Diachina”) as providing that “the BCCH information includes characteristics of cells that are candidates for the mobile station to lock on to, thus the information gives the mobiles options as to which cell it should receive the broadcast service from” and states that Raith incorporates Diachina by reference at column 4, lines 19-25. Despite diligent study of the Raith reference, Applicants are unable to find any incorporation of Diachina.

Nonetheless, Applicants have analyzed the Diachina reference. Diachina discloses a communication system using superframes to transmit data over a SMS system. (Abstract). The forward broadcast channel carries time critical system information, such as the structure of the DCCH or other parameters essential to access the system. (Col. 9, lines 63-65). Short messages, such as advertisements, are sent over a different channel, the S-BCCH channel. (Col. 10, lines 6-8). The overhead information transmitted may include: the paging slot to which the mobile station is assigned, whether the mobile station is allowed to make and receive any calls through a particular base station or is restricted to emergency calls, the power level, identity of the home system, whether an equalizer is used for compensation of distortion and attenuation, and the location of other DCCH channels. (Col. 12, lines 6-21). Applicants respectfully submit that Diachina does not disclose “a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”. Diachina is not directed toward setting up a broadcast session, rather Diachina establishes service parameters for which base station to use for a

particular call. Therefore, Applicants submit that Diachina does not disclose or suggest any motivation for a method as claimed in amended claim 1.

Because Raith and Diachina do not disclose all the limitations of claim 1, Applicants respectfully submit that claim 1 is not anticipated by Raith and Diachina. Since claims 2 and 4 depend from claim 1 and include additional limitations, these claims are also not anticipated by Raith and Diachina.

Claim 6 is allowable for the same reasons as given above for claim 1. The Examiner cited Raith and Diachina but also added U.S. Patent 5,353,332 to Raith (hereinafter "Raith II") as being incorporated by reference in Diachina. Despite careful study of the Raith reference Applicants were unable to find any reference to Diachina. Diachina incorporates by reference Raith II. Raith II is directed to a method and apparatus for configuring the control channel of each cell. The control channel is configured to broadcast absolute information about its cell and relative information about other cells, including the characteristics of those cells. The information may also include the location of other control channels. (Abstract). This information is then used to lock a mobile unit to a preferred cell. (Abstract). The information broadcast includes the presence, if any, of other cells and the characteristics of those cells, including minimum quality criteria and power requirements. (Col. 6, lines 22-28). Further information that may be broadcast includes the service profile of the cell, the control channel organization, and the type of cell. (Col. 6, lines 46-49). Applicants respectfully submit that Raith II does not disclose "a protocol stack, options in the protocol stack, and information to set up and synchronize a broadcast service".

Additionally, claims 7 and 9 depend from claim 6 and include additional limitations and are also not anticipated by Raith and Diachina.

Claim 11 is allowable for the same reasons as given above for claim 1. Additionally, claim 12 depends from claim 11 and includes additional limitations and is also not anticipated by Raith and Diachina.

Claim 16 is allowable for the same reasons as given above for claim 1.

Claim Rejections under 35 U.S.C. § 103

Claims 3, 8, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Raith in view of U.S. Patent 6,614,804 to McFadden (hereinafter “McFadden”).

To establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. “The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants’ disclosure.” In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicants respectfully submit that a prima facie case of obviousness has not been established regarding claims 3, 8, and 13 because the prior art cited does not teach or suggest all the claim limitations.

With respect to dependent claim 3, Applicants submit that the cited references do not teach or disclose the following limitation of independent claim 1, which is incorporated by reference into dependent claim 3: “transmitting broadcast overhead information corresponding to a broadcast session on an overhead transmission channel from a first device, wherein the broadcast overhead information includes a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”.

McFadden teaches transmission download of data to plural, mass storage medium-based remote users of content or software upgrades or multiple versions. (Abstract). McFadden uses existing satellite communications for downloading data to entertainment devices connected to a user’s television. (Col. 1, lines 11-13). The high volume downloads are done using existing satellite broadcast service provides with a high-bandwidth one-way communication to all users. (Col. 2, lines 42-44). Because of the unidirectional nature of the broadcast and the fact that there is no requirement for a pair-wise connection between a server and a corresponding client, there is no need for a handshake or protocol for two-way communication between a client and a server. (Col. 7, lines 3-8). The broadcast of content or software updates is sent to multiple clients at once and the clients are typically not differentiated. Each client receives identical data from the broadcast service provider. (Col. 7, lines 16-17). Applicants respectfully submit that McFadden does not teach or suggest the limitation: “transmitting broadcast overhead information corresponding to a broadcast session on an overhead transmission channel from a first device,

wherein the broadcast overhead information includes a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”.

Furthermore, Applicants submit there is no motivation to combine the references. Raith uses a broadcast control channel to send brief messages, such as stock quotes or headlines. McFadden teaches one-way downloads to television equipment for use at a later time. The method of Raith depends on a handshake protocol as found in cellular radio telephone systems. This protocol depends on acknowledgement messages between the mobile user station and a base station to maintain communication as the mobile moves. Combining Raith and McFadden results in a system that cannot accommodate a moving user who may shift among multiple base stations during downloads of data.

Applicants submit that claims 8 and 13 are allowable for the same reasons given above for claim 3.

Claims 5, 10, 14, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Raith in view of U.S. Patent 6,032,197 to Birdwell (hereinafter “Birdwell”). Applicants respectfully submit that a prima facie case of obviousness has not been established regarding claims 5, 10, 14, and 15 because the prior art cited does not teach or suggest all the claim limitations.

With respect to dependent claim 5, Applicants submit that the cited references do not teach or disclose the following limitation of independent claim 1, which is incorporated by reference into dependent claim 5: “transmitting broadcast overhead information corresponding to a broadcast session on an overhead transmission channel from a first device, wherein the broadcast overhead information includes a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”.

Birdwell teaches a broadcast transmission system that transmits data packets from a server to a client over a unidirectional broadcast network. (Abstract). Broadcast or multicast networks are used to deliver computer data and other content. (Col. 1, lines 59-62). These types of distribution networks are unidirectional. Data flows from the server to the client, but no return communication is possible over the same communication path. (Col. 1, lines 62-64). Birdwell teaches compressing data packets by compressing the packet header. (Col. 2, lines 19-20). The packet header compressor forms a compressed header from the fields of an associated

uncompressed header. (Col. 2, lines 48-49). Compression is achieved by removing the non-changing header fields from the uncompressed header. (Col. 5, lines 20-22). The server transmits a series of intermixed full-length and compressed packet over the broadcast medium to the clients. (Col. 2, lines 22-24). Each client has a packet decoder to extract the compression key blocks from the data packets. (Col. 3, lines 10-11). If the compression bit value indicates that the packet is compressed, the client uses a packet header decompressor to reconstruct the uncompressed header. (Col. 3, lines 15-18). Applicants respectfully submit that Birdwell does not teach or suggest the limitation: “transmitting broadcast overhead information corresponding to a broadcast session on an overhead transmission channel from a first device, wherein the broadcast overhead information includes a protocol stack, options in the protocol stack, and information to set up and synchronize the broadcast service”.

Applicants further submit that Birdwell teaches away from the method of the present invention for the same reasons given above for the McFadden reference. As noted above, a unidirectional transmission system is incompatible with a system incorporating a mobile user who establishes contact with multiple base stations during the course of a broadcast session.

Applicants submit that claims 10, 14, are allowable for the same reasons given above for claim 5. Claim 15 is allowable for the same reasons given previously for claim 1.

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Raith. Applicants submit that claim 17 is allowable for the same reasons given above for claim 16.

Responses to Arguments

The Examiner responded to the arguments filed March 8, 2004 in the current Office Action. The Examiner noted that the features upon which applicant relies (i.e., a service protocol option that is defined as (1) a protocol stack; (2) options in the protocol stack; (3) procedures for setting up and synchronizing the service) were not recited in the rejected claims. Applicants have amended the claims to incorporate the above features.

The Examiner responded that on page 21 paragraph 2 regarding the combination of Raith in view of McFadden, which Applicants regarded as an improper combination, the Examiner maintained that Raith discloses the claimed aspect of the invention. Applicant has amended the

invention and also responded to the Examiner's discussion. The complete discussion is found above under the sections of this response discussing the rejections in detail.

The Examiner also responded to page 21 paragraph 3, where Applicants submitted that there is no motivation to combine the Raith and McFadden references. Applicant has amended the invention and also responded to the Examiner's discussion. The complete discussion is found above under the sections of this response discussing the rejections in detail.

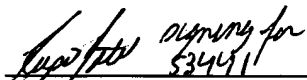
In addition, the Examiner responded to page 21 paragraph 6, where Applicants submitted that there is no motivation to combine the Raith and Birdwell references. Applicant has amended the invention and also responded to the Examiner's discussion. The complete discussion is found above under the sections of this response discussing the rejections in detail.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: October 1, 2004

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